

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/521319
Source: PCT
Date Processed by STIC: 1-28-05

ENTERED

Rev'd PCT/PTO



PCT

RAW SEQUENCE LISTING

DATE: 01/28/2005

PATENT APPLICATION: US/10/521,319

TIME: 11:41:28

Input Set : A:\PG4871 SEQUENCE LISTING.txt

Output Set: N:\CRF4\01282005\J521319.raw

```

5 <110> APPLICANT: Glaxo Group Limited
9 <120> TITLE OF INVENTION: Animal Models
13 <130> FILE REFERENCE: PG4871
C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/521,319
C--> 19 <141> CURRENT FILING DATE: 2005-01-14
23 <160> NUMBER OF SEQ ID NOS: 20
27 <170> SOFTWARE: PatentIn version 3.1
31 <210> SEQ ID NO: 1
33 <211> LENGTH: 2984
35 <212> TYPE: DNA
37 <213> ORGANISM: Homo sapiens
41 <400> SEQUENCE: 1
42 gcgccccagt cgacgctgag ctccctctgct actcagagtt gcaacctcag cctcgctatg      60
44 gctcccagca gcccccgggc cgcgctgccc gcactcctgg tcctgctcgg ggctctgttc      120
46 ccaggacctg gcaatgcccga gacatctgtg tccccctcaa aagtcacccg gccccgggga      180
48 ggctccgtgc tgggtgacatg cagcacctcc tgtgaccagc ccaagttgtt gggcatagag      240
50 accccgttgc ctaaaaagga gttgctcctg cctgggaaca accggaaggt gtatgaactg      300
52 agcaatgtgc aagaagatag ccaaccaatg tgctattcaa actgccctga tgggcagtca      360
54 acagctaaaa ccttcctcac cgtgtactgg actccagaac ggggtggaact ggcacccctc      420
56 ccctcttggc agccagtggg caagaacctt accctacgct gccaggtgga ggggtggggca      480
58 ccccgggcca acctcacctg ggtgctgctc cgtggggaga aggagctgaa acgggagcca      540
60 gctgtggggg agcccgtgga ggtcacgacc acggtgctgg tgaggagaga tcaccatgga      600
62 gccaatattc cgtgccgcac tgaactggac ctgccggccc aagggctgga gctgtttgag      660
64 aacacctcgg cccctacca gctccagacc ttgtcctgc cagcgactcc cccacaactt      720
66 gtcagccccg gggctcctaga ggtggacacg caggggaccg tggctgttc cctggacggg      780
68 ctgttccag tctcggaggc ccagggtccac ctggcactgg gggaccagag gttgaacccc      840
70 acagtcacct atggcaacga ctccctctcg gccaaaggcct cagtcagtggt gaccgcagag      900
72 gacgagggca cccagcggct gacgtgtgca gtaatactgg ggaaccagag ccaggagaca      960
74 ctgcagacag tgacctcta cagctttccg gcgcccacg tgattctgac gaagccagag      1020
76 gtctcagaag ggaccgaggt gacagtgaag tgtgaggccc accctagagc caaggtgacg      1080
78 ctgaatgggg ttccagccca gccactgggc ccgaggggcc agctcctgct gaaggccacc      1140
80 ccaggaggaca acgggcgcag cttctcctgc tctgcaaccc tggaggtggc cgccagctt      1200
82 atacacaaga accagaccgc ggagcttcgt gtccctgtatg gccccgact ggacgagagg      1260
84 gattgtccgg gaaactggac gtggccagaa aattccagc agactccaat gtgccaggct      1320
86 tgggggaacc cattgcccga gctcaagtgt ctaaaggatg gcactttccc actgccatc      1380
88 ggggaatcag tgactgtcac tcgagatctt gagggcacct acctctgtcg ggccaggagc      1440
90 actcaagggg aggtcacccg caaggtgacc gtgaatgtgc tctccccccg gtatgagatt      1500
92 gtcacatca ctgtggtagc agccgcagtc ataatgggca ctgcaggcct cagcacgtac      1560
94 ctctataacc gccagcggaa gatcaagaaa tacagactac aacaggccca aaaagggacc      1620
96 cccatgaaac cgaacacaca agccacgcct ccctgaacct atcccgggac agggcctctt      1680
98 cctcggcctt cccatattgg tggcagtggt gccacactga acagagtgga agacatatgc      1740
100 catgcagcta cacctaccgg ccctgggacg ccggaggaca gggcattgtc ctcagtcaga      1800
102 tacaacagca ttgggggcca tggtaacctg acacctaaaa cactaggcca cgcactctgat      1860

```

RAW SEQUENCE LISTING

DATE: 01/28/2005

PATENT APPLICATION: US/10/521,319

TIME: 11:41:28

Input Set : A:\PG4871 SEQUENCE LISTING.txt

Output Set: N:\CRF4\01282005\J521319.raw

```

104 ctgtagtcac atgactaagc caagaggaag gagcaagact caagacatga ttgatggatg 1920
106 ttaaagtcta gcctgatgag aggggaagtg gtgggggaga catagcccca ccatgaggac 1980
108 atacaactgg gaaatactga aacttgctgc ctattgggta tgctgaggcc ccacagactt 2040
110 acagaagaag tggccctcca tagacatgtg tagcatcaaa acacaaaggc ccacacttcc 2100
112 tgacggatgc cagcttgggc actgctgtct actgacccca acccttgatg atatgtattt 2160
114 attcatttgt tattttacca gctatttatt gagtgtcttt tatgtaggct aaatgaacat 2220
116 aggtctcttg cctcacggag ctcccagtc taatcacatt caaggtcacc aggtacagtt 2280
118 gtacaggttg tacactgcag gagagtgcct ggcaaaaaga tcaaattggg ctgggacttc 2340
120 tcattggcca acctgccttt cccagaagg agtgattttt ctatcggcac aaaagcacta 2400
122 tatggactgg taatggttac aggttcagag attaccagc gaggccttat tctcccttc 2460
124 ccccaaaaac tgacaccttt gttagccacc tccccaccca catacatttc tgccagtgtt 2520
126 cacaatgaca ctcagcggtc atgtctggac atgagtgcc agggaatatg cccaagctat 2580
128 gccttgtcct cttgtcctgt ttgcatttca ctgggagctt gcactatgca gctccagttt 2640
130 cctgcagtga tcagggtcct gcaagcagtg gggaaggggg ccaaggtatt ggaggactcc 2700
132 ctcccagctt tggaagcctc atccgcgtgt gtgtgtgtgt gtatgtgtag acaagctctc 2760
134 gctctgtcac ccaggctgga gtgcagtgg gcaatcatgg ttcactgcag tcttgacctt 2820
136 ttgggctcaa gtgatcctcc cacctcagcc tcttgagtag ctgggacctt aggtcacaa 2880
138 caccacacct ggcaaatttg atttttttt tttttccaga gacggggtct cgcaacattg 2940
140 cccagacttc ctttgtgta gttaataaag ctttctcaac tgcc 2984

```

143 <210> SEQ ID NO: 2

145 <211> LENGTH: 189

147 <212> TYPE: DNA

149 <213> ORGANISM: Homo sapiens

153 <400> SEQUENCE: 2

```

154 ggaggctccg tgctggtgac atgcagcacc tctgtgacc agcccaagtt gttgggcata 60
156 gagaccccg tgcctaaaaa ggagttgctc ctgcctggga acaaccggaa ggtgtatgaa 120
158 ctgagcaatg tgcaagaaga tagccaacca atgtgctatt caaactgccc tgatgggcag 180
160 tcaacagct 189

```

163 <210> SEQ ID NO: 3

165 <211> LENGTH: 198

167 <212> TYPE: DNA

169 <213> ORGANISM: Homo sapiens

173 <400> SEQUENCE: 3

```

174 ggcaagaacc ttaccctacg ctgccagggtg gaggggtgggg caccgccggc caacctcacc 60
176 gtggtgctgc tccgtgggga gaaggagctg aaacgggagc cagctgtggg ggagcccgtc 120
178 gaggtcacga ccacgggtgct ggtgaggaga gatcaccatg gagccaattt ctcgtgccgc 180
180 actgaactgg acctgcgg 198

```

183 <210> SEQ ID NO: 4

185 <211> LENGTH: 532

187 <212> TYPE: PRT

189 <213> ORGANISM: Homo sapiens

193 <400> SEQUENCE: 4

```

195 Met Ala Pro Ser Ser Pro Arg Pro Ala Leu Pro Ala Leu Leu Val Leu
196 1          5          10          15
199 Leu Gly Ala Leu Phe Pro Gly Pro Gly Asn Ala Gln Thr Ser Val Ser
200          20          25          30
203 Pro Ser Lys Val Ile Leu Pro Arg Gly Gly Ser Val Leu Val Thr Cys
204          35          40          45
207 Ser Thr Ser Cys Asp Gln Pro Lys Leu Leu Gly Ile Glu Thr Pro Leu

```

DATE: 01/28/2005

TIME: 11:41:28

Input Set : A:\PG4871 SEQUENCE LISTING.txt

Output Set: N:\CRF4\01282005\J521319.raw

208		50					55					60					
211	Pro	Lys	Lys	Glu	Leu	Leu	Leu	Pro	Gly	Asn	Asn	Arg	Lys	Val	Tyr	Glu	
212	65					70					75					80	
215	Leu	Ser	Asn	Val	Gln	Glu	Asp	Ser	Gln	Pro	Met	Cys	Tyr	Ser	Asn	Cys	
216					85					90					95		
219	Pro	Asp	Gly	Gln	Ser	Thr	Ala	Lys	Thr	Phe	Leu	Thr	Val	Tyr	Trp	Thr	
220				100					105					110			
223	Pro	Glu	Arg	Val	Glu	Leu	Ala	Pro	Leu	Pro	Ser	Trp	Gln	Pro	Val	Gly	
224			115					120					125				
227	Lys	Asn	Leu	Thr	Leu	Arg	Cys	Gln	Val	Glu	Gly	Gly	Ala	Pro	Arg	Ala	
228		130					135					140					
231	Asn	Leu	Thr	Val	Val	Leu	Leu	Arg	Gly	Glu	Lys	Glu	Leu	Lys	Arg	Glu	
232	145					150					155					160	
235	Pro	Ala	Val	Gly	Glu	Pro	Ala	Glu	Val	Thr	Thr	Thr	Val	Leu	Val	Arg	
236				165					170						175		
239	Arg	Asp	His	His	Gly	Ala	Asn	Phe	Ser	Cys	Arg	Thr	Glu	Leu	Asp	Leu	
240				180					185					190			
243	Arg	Pro	Gln	Gly	Leu	Glu	Leu	Phe	Glu	Asn	Thr	Ser	Ala	Pro	Tyr	Gln	
244			195					200					205				
247	Leu	Gln	Thr	Phe	Val	Leu	Pro	Ala	Thr	Pro	Pro	Gln	Leu	Val	Ser	Pro	
248		210					215					220					
251	Arg	Val	Leu	Glu	Val	Asp	Thr	Gln	Gly	Thr	Val	Val	Cys	Ser	Leu	Asp	
252	225					230					235				240		
255	Gly	Leu	Phe	Pro	Val	Ser	Glu	Ala	Gln	Val	His	Leu	Ala	Leu	Gly	Asp	
256				245						250					255		
259	Gln	Arg	Leu	Asn	Pro	Thr	Val	Thr	Tyr	Gly	Asn	Asp	Ser	Phe	Ser	Ala	
260				260					265					270			
263	Lys	Ala	Ser	Val	Ser	Val	Thr	Ala	Glu	Asp	Glu	Gly	Thr	Gln	Arg	Leu	
264			275					280					285				
267	Thr	Cys	Ala	Val	Ile	Leu	Gly	Asn	Gln	Ser	Gln	Glu	Thr	Leu	Gln	Thr	
268		290					295					300					
271	Val	Thr	Ile	Tyr	Ser	Phe	Pro	Ala	Pro	Asn	Val	Ile	Leu	Thr	Lys	Pro	
272	305					310					315					320	
275	Glu	Val	Ser	Glu	Gly	Thr	Glu	Val	Thr	Val	Lys	Cys	Glu	Ala	His	Pro	
276				325						330					335		
279	Arg	Ala	Lys	Val	Thr	Leu	Asn	Gly	Val	Pro	Ala	Gln	Pro	Leu	Gly	Pro	
280				340					345					350			
283	Arg	Ala	Gln	Leu	Leu	Leu	Lys	Ala	Thr	Pro	Glu	Asp	Asn	Gly	Arg	Ser	
284			355					360					365			</	

RAW SEQUENCE LISTING

DATE: 01/28/2005

PATENT APPLICATION: US/10/521,319

TIME: 11:41:28

Input Set : A:\PG4871 SEQUENCE LISTING.txt

Output Set: N:\CRF4\01282005\J521319.raw

307 Arg Asp Leu Glu Gly Thr Tyr Leu Cys Arg Ala Arg Ser Thr Gln Gly
 308 450 455 460
 311 Glu Val Thr Arg Glu Val Thr Val Asn Val Leu Ser Pro Arg Tyr Glu
 312 465 470 475 480
 315 Ile Val Ile Ile Thr Val Val Ala Ala Ala Val Ile Met Gly Thr Ala
 316 485 490 495
 319 Gly Leu Ser Thr Tyr Leu Tyr Asn Arg Gln Arg Lys Ile Lys Lys Tyr
 320 500 505 510
 323 Arg Leu Gln Gln Ala Gln Lys Gly Thr Pro Met Lys Pro Asn Thr Gln
 324 515 520 525

327 Ala Thr Pro Pro

328 530

331 <210> SEQ ID NO: 5

333 <211> LENGTH: 63

335 <212> TYPE: PRT

337 <213> ORGANISM: Homo sapiens

341 <400> SEQUENCE: 5

343 Gly Gly Ser Val Leu Val Thr Cys Ser Thr Ser Cys Asp Gln Pro Lys

344 1 5 10 15

347 Leu Leu Gly Ile Glu Thr Pro Leu Pro Lys Lys Glu Leu Leu Leu Pro

348 20 25 30

351 Gly Asn Asn Arg Lys Val Tyr Glu Leu Ser Asn Val Gln Glu Asp Ser

352 35 40 45

355 Gln Pro Met Cys Tyr Ser Asn Cys Pro Asp Gly Gln Ser Thr Ala

356 50 55 60

359 <210> SEQ ID NO: 6

361 <211> LENGTH: 66

363 <212> TYPE: PRT

365 <213> ORGANISM: Homo sapiens

369 <400> SEQUENCE: 6

371 Gly Lys Asn Leu Thr Leu Arg Cys Gln Val Glu Gly Gly Ala Pro Arg

372 1 5 10 15

375 Ala Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys Glu Leu Lys Arg

376 20 25 30

379 Glu Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr Thr Val Leu Val

380 35 40 45

383 Arg Arg Asp His His Gly Ala Asn Phe Ser Cys Arg Thr Glu Leu Asp

384 50 55 60

387 Leu Arg

388 65

391 <210> SEQ ID NO: 7

393 <211> LENGTH: 1614

395 <212> TYPE: DNA

397 <213> ORGANISM: Mus sp.

401 <400> SEQUENCE: 7

402 atggcttcaa cccgtgccaa gcccacgcta cctctgctcc tggccctggg caccgttggt 60

404 atccctgggc ctggtgatgc tcaggtatcc atccatccca gagaagcctt cctgccccag 120

406 ggtgggtccg tgcaggtgaa ctgttcttcc tcatgcaagg aggacctcag cctgggcttg 180

408 gagactcagt ggctgaaaga tgagctcgag agtggaccca actggaagct gtttgagctg 240

RAW SEQUENCE LISTING

DATE: 01/28/2005

PATENT APPLICATION: US/10/521,319

TIME: 11:41:28

Input Set : A:\PG4871 SEQUENCE LISTING.txt

Output Set: N:\CRF4\01282005\J521319.raw

```

410 agcgagatcg gggaggacag cagtccgctg tgctttgaga actgtggcac cgtgcagtcg      300
412 tccgcttccg ctaccatcac cgtgtattcg tttccggaga gtgtggagct gagacctctg      360
414 ccagcctggc agcaagtagg caaggacctc accctgcgct gccacgtgga tggaggagca      420
416 ccgcggaacc agctctcagc agtgctgctc cgtggggagg agatactgag ccgccagcca      480
418 gtgggtgggc accccaagga cccaaggag atcacattca cgggtgctggc tagcagaggg      540
420 gaccacggag ccaatttctc atgccgcaca gaactggatc tcaggccgca agggctggca      600
422 ttgtttctct atgtctccga ggccaggagc ctccggactt tcgatcttcc agctaccatc      660
424 ccaaagctcg acacccctga cctcctggag gtgggcaccc agcagaagtt gttttgctcc      720
426 ctggaaggcc tgtttcctgc ctctgaagct cggatatacc tggagctggg aggccagatg      780
428 ccgacccagg agagcacaaa cagcagtgc tctgtgtcag ccactgcctt ggtagagggtg      840
430 actgaggagt tcgacagAAC cctgccgctg cgctgcgttt tggagctagc ggaccagatc      900
432 ctggagacgc agaggacctt aacagtctac aacttttcag ctccggtcct gaccctgagc      960
434 cagctggagg tctcggaagg gagccaagta actgtgaagt gtgaagccca cagtgggtcg     1020
436 aagggtggtt ttctgagcgg cgtcgagcct aggccaccca ccccgagggt ccaattcaca     1080
438 ctgaatgcca gctcggagga tcacaaacga agcttctttt gctctgccgc tctggagggtg     1140
440 gcgggaaagt tctgttttaa aaaccagacc ctggaactgc acgtgctgta tggctctcgg     1200
442 ctggacgaga cggactgctt ggggaactgg acctggcaag aggggtctca gcagactctg     1260
444 aaatgccagg cctgggggaa cccatctcct aagatgacct gcagacggaa ggcagatggt     1320
446 gccctgctgc ccatcggggt ggtgaagtct gtcaaacagg agatgaatgg tacatacgtg     1380
448 tgccatgcct ttagctccca tgggaatgtc accaggaatg tgtacctgac agtactgtac     1440
450 cactctcaaa ataactggac tataatcatt ctggtgccag tactgctggt cattgtgggc     1500
452 ctcgtgatgg cagcctctta tgtttataac cgccagagaa agatcaggat atacaagtta     1560
454 cagaaggctc aggaggaggc cataaaactc aagggacaag ccccacctcc ctga           1614
457 <210> SEQ ID NO: 8
459 <211> LENGTH: 204
461 <212> TYPE: DNA
463 <213> ORGANISM: Mus sp.
467 <400> SEQUENCE: 8
468 ggcacccagc agaagttggt ttgctccctg gaaggcctgt ttcttgcttc tgaagctcgg      60
470 atatacctgg agctgggagg ccagatgccg acccaggaga gcacaaacag cagtgcactct      120
472 gtgtcagcca ctgccttggt agagggtgact gaggagttcg acagaaccct gccgctgcgc      180
474 tgcgttttgg agctagcggg ccag
477 <210> SEQ ID NO: 9
479 <211> LENGTH: 162
481 <212> TYPE: DNA
483 <213> ORGANISM: Mus sp.
487 <400> SEQUENCE: 9
488 gggagccaag taactgtgaa gtgtgaagcc cacagtgggt cgaagggtgg tcttctgagc      60
490 ggcgtcgagc ctaggccacc caccgccgaa gtccaattca cactgaatgc cagctcggag      120
492 gatcacaaac gaagcttctt ttgctctgcc gctctggagg tg
495 <210> SEQ ID NO: 10
497 <211> LENGTH: 159
499 <212> TYPE: DNA
501 <213> ORGANISM: Mus sp.
505 <400> SEQUENCE: 10
506 gaggggtctc agcagactct gaaatgccag gcctggggga acccatctcc taagatgacc      60
508 tgcagacgga aggcagatgg tgccctgctg cccatcgggg tggatgaagt tgtcaaacag      120
510 gagatgaatg gtacatacgt gtgccatgcc ttagctcc
513 <210> SEQ ID NO: 11

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/521,319

DATE: 01/28/2005

TIME: 11:41:29

Input Set : A:\PG4871 SEQUENCE LISTING.txt

Output Set: N:\CRF4\01282005\J521319.raw

L:17 M:270 C: Current Application Number differs, Replaced Current Application Number

L:19 M:271 C: Current Filing Date differs, Replaced Current Filing Date